



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,842	09/09/2003	Clyde C. Lunsford	011920-1274	3011

24504 7590 03/09/2006

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP
100 GALLERIA PARKWAY, NW
STE 1750
ATLANTA, GA 30339-5948

EXAMINER

SPERTY, ARDEN B

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/658,842

Applicant(s)

LUNSFORD ET AL.

Examiner

Arden B. Sperty

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL OFFICE ACTION

1. Applicant's comments and amendments, submitted 12/15/05, have been entered and carefully considered. Objections to the specification and claims are withdrawn per the submitted amendments. Arguments regarding the prior art rejections are addressed at the end of this office action. The Terminal Disclaimer, submitted 12/15/05, is NOT approved, because the attorney is not of record.

Claim Rejections - 35 USC § 112

2. Claims 1, 9, 19, 28, 36, and 43 were rejected under 35 USC 112, second paragraph, because of the "uncrystallized" language. The objectionable language has been removed from the claims, thus the rejection is withdrawn.

3. Claims 4, 9, 10, 24, 33, 41, 44 and 45 were rejected under 35 USC 112, second paragraph, because there was no antecedent basis for a dye which was presumed to be required in the presence of a "dye-assisting agent." The rejection is withdrawn, because Applicant has indicated a section of the specification wherein it is recited that a dye-assisting agent may be present without a dye.

4. The rejection of claims 5, 15, and 19, under 35 USC 112, second paragraph, is withdrawn per amendment to the claim. The claim has been amended to properly reflect that the claimed flame retardant is associated with the cellulosic fibers.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1771

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 6-7, 28-32, 34, 36-40, 43, 46-49, 51-52, 54, and 57-60 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5356700 to Tanaka et al.

7. The Tanaka reference teaches flame-resistant fabrics (abstract). The fabrics are made of spun yarns comprising a uniform blend of aromatic polyamide fibers, cellulosic fibers, and polyester fibers (col. 2, lines 31-42). Aromatic polyamides used in the fabric include meta-type aramid fibers (col. 2, lines 61-65), which are capable of crystallization. The cellulosic fibers may be rayon fibers treated with a flame retarder (col. 4, lines 7-11). Thus the limitations of claims 1-3 are met. The structural requirements of claims 28-32, 36-40, 43, and 46-49 are also met. Although the prior art does not perform the property evaluation recited in claims 6-7, 28, 34, 36, and 51-52 the prior art teaches the claimed structural and material requirements. It follows that the properties associated therewith are inherent.

8. The Tanaka reference further teaches dyeing the fabric (col. 6, lines 7-22), thus meeting the additional limitation of claim 54. The limitations of claims 57- 60 are met as stated above with respect to claims requiring the same structure. As stated above with respect to similar claims, although the prior art does not perform the property evaluation recited in claims 62-63, the prior art teaches the claimed structural and material requirements. It follows that the properties associated therewith are inherent.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4, 9-14, 16-18, 33, 35, 41, 42, 44-45, 53, 55-56, and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5356700 to Tanaka as applied above, and further in view of USPN 5306312 to Riggins et al. The rejection remains as stated in the previous office action.

11. The Tanaka reference teaches dyeing the disclosed fabric (col. 6, lines 7-22), but is not concerned with the dyeing materials. USPN 5306312 to Riggins teaches a conventional dyeing process, such as the one described by Tanaka at column 6, lines 7-22. Riggins further details the process and materials, describing the claimed dye-assisting agents and purporting their advantageous dyeing effects. Riggins further discusses the advantageous flame-retarding properties imparted to the meta-aramid fibers. Thus it would have been obvious to one of ordinary skill in the art to include the dye-assisting agents taught by the Riggins reference when dyeing the meta-aramid-containing fabric according to Tanaka. The limitations of claims 4, 9-10, 33, 41, 44-45, 55-56.

12. The structure of claims 11-14, which depend from claim 9, is taught by Tanaka as described above.

13. The properties required by claims 16-17 are inherent to the structure taught by the prior art.

14. Regarding claims 8, 18, 35, 42, 53, and 64, Tanaka is not concerned with the shade depth, or L value, of the dyed product. The depth of shade is a matter of personal preference, and therefore would have been obvious to one of ordinary skill in the art.

Double Patenting

15. Claims 1-64 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-57, specifically 1-7 of U.S. Patent No. 6626964. Although the conflicting claims are not identical, they are not patentably distinct from each other because the pending claims are slightly broader than specifically issued claims 1-7. That which is more broad is inherently anticipated by that which is narrower.

16. Claims 1-64 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-30 of U.S. Patent No. 6132476. Although the conflicting claims are not identical, they are not patentably distinct from each other because the pending claims are slightly broader than the issued claims. That which is more broad is inherently anticipated by that which is narrower. The pending claims are more broad than the issued claims because the pending claims do not require blending of the inherently flame resistant and cellulosic fibers. The scope of the pending claims includes fabrics which are not blended, such as woven fabrics

comprising separate threads of each material. Therefore, the pending claims are broader than the issued claims of USPN 6132476.

17. Claims 1-64 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1- 26 of U.S. Patent No. 6818024. The presently claimed structure is an intermediate form of the final product of Patent 6818024. The presently claimed structure must be provided to form the product of Patent 6818024. The presently claimed structure is an inherent intermediate, which precedes the final product of Patent 6818024.

Response to Arguments

18. Applicant's comments, submitted 12/15/05, have been considered, but are unpersuasive. Applicant argues the 35 USC 102(b) rejection and the 35 USC 103(a) rejection, stating that the prior art includes polyester fibers, while the claimed invention does not. While the claimed invention may not require polyester fibers, the open language of the claims does not exclude polyester fibers. Therefore, the prior art still applies to the claims, as stated above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 1771

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arden B. Sperty whose telephone number is (571)272-1543. The examiner can normally be reached on M-Th, 08:00-16:00.

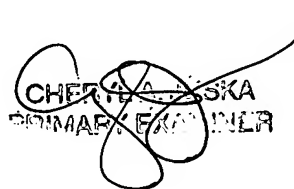
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571)272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Arden B. Sperty
Examiner
Art Unit 1771

March 01, 2006



CHERYL A. SKANSKA
PRIMARY EXAMINER